

IN THE CLAIMS:

1. (Previously Presented) A method for forming a polymeric coating on a substrate surface, which method comprises the steps of:
 - i. activating (A) a monomer selected from (a) at least one polymerizable organic acid monomer comprising at least one acid group and at least one polymerizable group and (b) at least one polymerizable organic acid anhydride monomer comprising at least one acid anhydride group and at least one polymerizable group, and (B) at least one polymerizable organic base monomer comprising at least one basic group and at least one polymerizable group, by subjecting the monomers to a soft ionization plasma process; and
 - ii. depositing the activated monomers resulting from step (i) onto the substrate surface thereby forming a polymeric coating containing salts resulting from interaction between acidic and basic functional groups on side chains of the polymeric coating.
2. (Previously Presented) The method in accordance with claim 1 wherein the soft ionization plasma process is a low pressure pulsed plasma.
3. (Previously Presented) The method in accordance with claim 2 wherein the pulse on-time is from 10 to 1000 μ s, and pulse off-time is from 1000 to 10000 μ s.

4. (Previously Presented) The method in accordance with claim 1 wherein the soft ionization plasma process is an atmospheric pressure glow discharge.
5. (Previously Presented) The method in accordance with claim 1 wherein the polymerizable organic acid monomer is a polymerizable carboxylic acid.
6. (Previously Presented) The method in accordance with claim 5 wherein the polymerizable carboxylic acid is selected from at least one of acrylic acid, alkylacrylic acid, fumaric acid, maleic acid, citraconic acid, cinnamic acid, itaconic acid, sorbic acid and mesaconic acid.
7. (Previously Presented) The method in accordance with claim 1 wherein the organic base monomer is a polymerizable primary or secondary amine.
8. (Previously Presented) The method in accordance with claim 7 wherein the organic base monomer is selected from at least one of 2-aminoethylene, 3-aminopropylene, 4-aminobutylene, and 5-aminopentylene.
9. (Previously Presented) The method in accordance with claim 1 wherein the step of activating further comprises activating a spacer molecule.

10. (Previously Presented) The method in accordance with claim 9 wherein the spacer molecule is an alkene or diene.
11. (Previously Presented) The method in accordance with claim 1, wherein the substrate surface is activitated, or cleaned and activated using a plasma treatment before depositing the activated monomers.
12. (Previously Presented) The method in accordance with claim 2 wherein at least one of the polymerizable organic base monomer and the polymerizable organic acid monomer is introduced into the pulsed plasma in the form of a vapor.
13. (Previously Presented) The method in accordance with claim 4 wherein at least one of the polymerizable organic base monomer and the polymerizable organic acid monomer is introduced into the atmospheric pressure glow discharge in the form of an atomized liquid.
14. (Previously Presented) The method in accordance with claim 13 wherein the atomized liquid is produced using an ultrasonic nozzle.
- 15-16. (Cancelled)